DaimlerChrysler AG

Patent claims

1. A method for operating a motor vehicle having
   - an internal combustion engine (11),
   - an automatic start/stop device for the internal combustion engine (11),
   - a controllable brake device (22) by means of which a braking torque can be applied to the motor vehicle, and
   - a brake pedal (24) which can be activated by a vehicle driver,

   wherein the brake device (22) is actuated by a control device (12, 23) in an automatic stop phase of the internal combustion engine (11) as a function of a degree of activation of the brake pedal (24), characterized in that
   - the control device (12, 23) can increase the braking torque independently of the degree of activation of the brake pedal (24),
   - the control device (12, 23) checks, at the start of the automatic stop phase, and during the automatic stop phase, of the internal combustion engine (11), whether the currently acting braking torque is smaller than a threshold value, and
   - when there is a positive result of the check, the braking torque increases to a value which is greater than or equal to the threshold value.

2. The method as claimed in claim 1, characterized in that the control device (12, 23) determines the threshold value as a function of state variables and/or operating variables of the motor vehicle before the brake device (22) is actuated.

3. The method as claimed in claim 1 or 2,

characterized in that the control device (12, 23) determines the threshold value as a function of environmental variables before the brake device (22) is actuated.

4. The method as claimed in claim 2 or 3, characterized in that the control device (12, 23) determines

- a braking torque (M_{brake_stop}) which is necessary to stop the motor vehicle, and
- sets the aforesaid threshold value to a value which is greater than or equal to the specific braking torque (M_{brake_stop}).

5. The method as claimed in one of claims 1 to 4, characterized in that during the stop phase the control device (12, 23) monitors whether the motor vehicle is moving, and in the case of a movement it actuates the brake device (22) in such a way that the braking torque is increased.

6. The method as claimed in one of claims 1 to 5, characterized in that the control device (23) increases the braking torque before the internal combustion engine (11) starts.